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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/597,553	06/19/2000	Jung Won Kang	YHK-047	4966

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Chantilly, VA 20153

EXAMINER

SAID, MANSOUR M

ART UNIT PAPER NUMBER

2673

DATE MAILED: 01/15/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.
09/597,553

Applicant(s)
Jung Won Kang et al.

Examiner
Mansour M. Said

Art Unit
2673



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Oct 30, 2002
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above, claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 7, 10-13, 15-27, and 31 is/are rejected.
- 7) ☒ Claim(s) 3-6, 8, 9, 14, and 28-30 is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____ 6) ☐ Other:

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DETAILED ACTION

Response to Amendment

1. This office action is in respond to the amendment filed October 30, 2002. New claims (15-31) have been added.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371© of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

3. Claims 18-22, and 25-27 are rejected under 35 U.S.C. 102(e) as being anticipated by Park et al. (6,262,532 B1; hereinafter referred to as Park).

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As to claims 18 and 25, Park teaches a discharge cell, comprising a first electrode (figure 3, (22)), a second electrode (figure 3, (24) that crosses the first electrode (figure 3, (22)), a dielectric layer (figure 3, (23)) positioned between the first and second electrodes, and at least one auxiliary electrode (figure 3, (26)) coupled to one of the first (figure 3, (22)) and second electrodes (figure 3, (24) (figures 3-7; abstract; column 2, lines 15-67; column 3, line 30 through column 4, line 67; and column 5, line 1 through column 6, line 57); a plurality of third electrodes associated with each of the first electrodes, wherein each of the plurality of third electrodes have a predetermined width and a predetermined length that runs in a direction substantially parallel to the second direction (figures 3-7; abstract; column 2, lines 15-67; column 3, line 30 through column 4, line 67; and column 5, line 1 through column 6, line 57).

As to claim 19, Park (figures 3-7) teaches that the first electrode (22) comprises an address electrode and the second electrode (24) (abstract; and column 3, line 30 through column 4, line 67).

As to claim 20, Park (figures 3-6) discloses wherein the at least one auxiliary electrode comprises a first auxiliary electrode connected to the first electrode (column 4, lines 54-67).

As to claim 21, Park (figures 3-6) teaches wherein the at least one auxiliary electrode further comprising a second auxiliary electrode connected to the second electrode (column 4, lines 1-67).

As to claim 22, Park (figures 3-7) teaches wherein the at least one auxiliary electrode is electrically connected to the one of the first and second electrodes (abstract and column 3, line 30 through column 4, line 67).

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As to claims 26-27, Park (figures 3-7) teaches wherein the plurality of third electrodes are electrically coupled (connected) to the plurality of first electrodes (abstract and column 3, line 30 through column 4, line 67).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. **Claims 1-2, 7, 10, 15-16, 23-24 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Park in view of Baranov et al. (6,100,641; hereinafter referred to as Baranov).**

6. As to claims 1, 7, 10, 15-18, 23-24 and 31, Park teaches a discharge cell, comprising a first electrode (figure 3, (22)), a second electrode (figure 3, (24)) that crosses the first electrode (figure 3, (22)), a dielectric layer (figure 3, (23)) positioned between the first and second electrodes, and at least one auxiliary electrode (figure 3, (26)) coupled to one of the first (figure 3, (22)) and second electrodes (figure 3, (24)) (figures 3-7; abstract; column 2, lines 15-67; column 3, line 30 through column 4, line 67; and column 5, line 1 through column 6, line 57); a plurality of third electrodes associated with each of the first electrodes, wherein each of the plurality of third electrodes (figures 3-7; abstract; column 2, lines 15-67; column 3, line 30 through column 4, line 67; and column 5, line 1 through column 6, line 57), and the at least one auxiliary electrode

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further comprising a second auxiliary electrode connected to the second electrode (column 4, lines 1-67).

Park does not expressly disclose that a plasma display having a radio frequency.

However, Baranov disclose a plasma display having a radio frequency (column 3, lines 22-35).

Therefore, it would have been obvious to one ordinary skill in the art at the time the invention was made to incorporate Baranov's plasma display having radio frequency (pulse) into Park's plasma display so as to increase the versatility of the display device.

As to claim 2, Park (figures 3-7) teaches wherein the first electrode is an address electrode formed on a substrate, and the second electrode line is a scanning electrode formed on the dielectric layer covering the address electrode (abstract; column 2, lines 15-67; column 3, line 30 through column 4, line 67; and column 5, line 1 through column 6, line 57).

As to claim 13, Park (figures 3-7) teaches address electrode to be perpendicular to the address electrode at a position adjacent to an intersection between the address electrode and the scanning electrode, and is arranged at a position parallel to the scanning electrode (abstract; column 2, lines 15-67; column 3, line 30 through column 4, line 67; and column 5, line 1 through column 6, line 57).

7. Claims 11-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Park in view of Baranov as applied to claim 10 above, and further in view of Bae (5,991,416).

As to claim 11, Park and Baranov teach all claimed limitation except that a high pass filter.

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However, Bae (figures 1 and 3) teaches a high pass filter (13) (column 5, lines 5-67)..

Therefore, it would have been obvious to one ordinary skill in the art at the time the invention was made to combine Bae's device having a high pass filter into Park's modified device so as to increase the versatility of the device.

As to claim 12, Park and Baranov teach all claimed limitation except that a first low pass filter a second low pass filter.

However, Bae (figures 1 and 3) teaches a first low pass filter a second low pass filter (10-12, and 14-16) (column 5, lines 5-67).

Therefore, it would have been obvious to one ordinary skill in the art at the time the invention was made to combine Bae's device having a high pass filter into Park's modified device so as to increase the versatility of the device.

Allowable Subject Matter

8. Claims 3-6, 8-9, 14 and 28-30 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

9. Applicant's arguments with respect to claims 1-2, 7, and 10-13 have been considered but are moot in view of the new ground(s) of rejection.

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Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Mansour M. Said** whose telephone number is **(703) 306-5411**.

The examiner can normally be reached on Monday through Thursday from 8:30 a.m. to 6:00 p.m. The examiner can also be reached on alternate Friday from 8:30 a.m. to 5:00 p.m. EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Shalwala Bipin**, can be reached at **(703) 305-4938**.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 872-9314 (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal

Drive, Arlington, VA, Sixth Floor (Receptionist)

12. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer service Office whose telephone number is (703) 306-0377.

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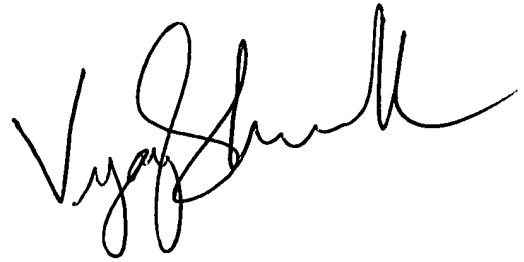
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Patent Examiner

January 3, 2003

Mansour M. Said

A handwritten signature in black ink, appearing to read "Vijay Shankar". The signature is fluid and cursive, with the first name "Vijay" and last name "Shankar" clearly distinguishable.

**VIJAY SHANKAR
PRIMARY EXAMINER**